

Figure 1

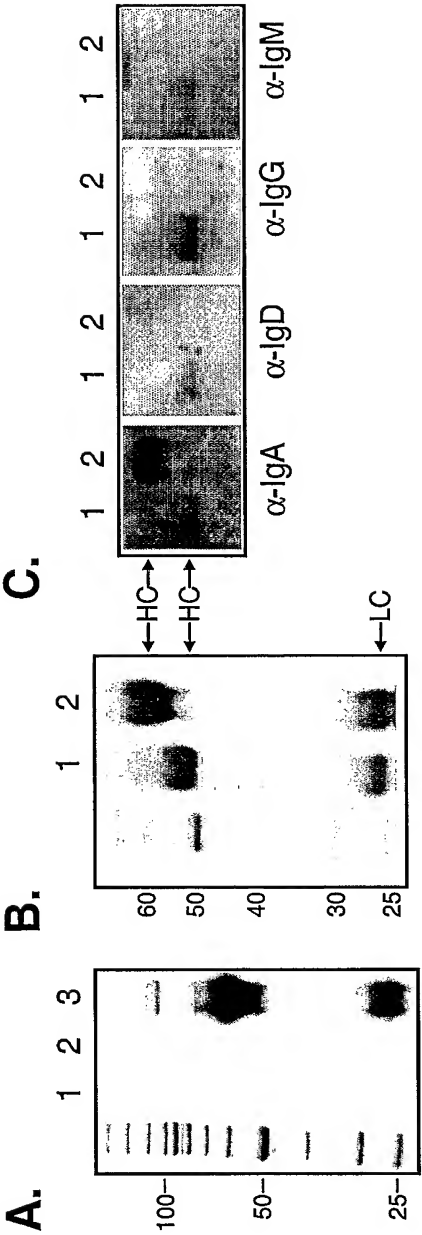
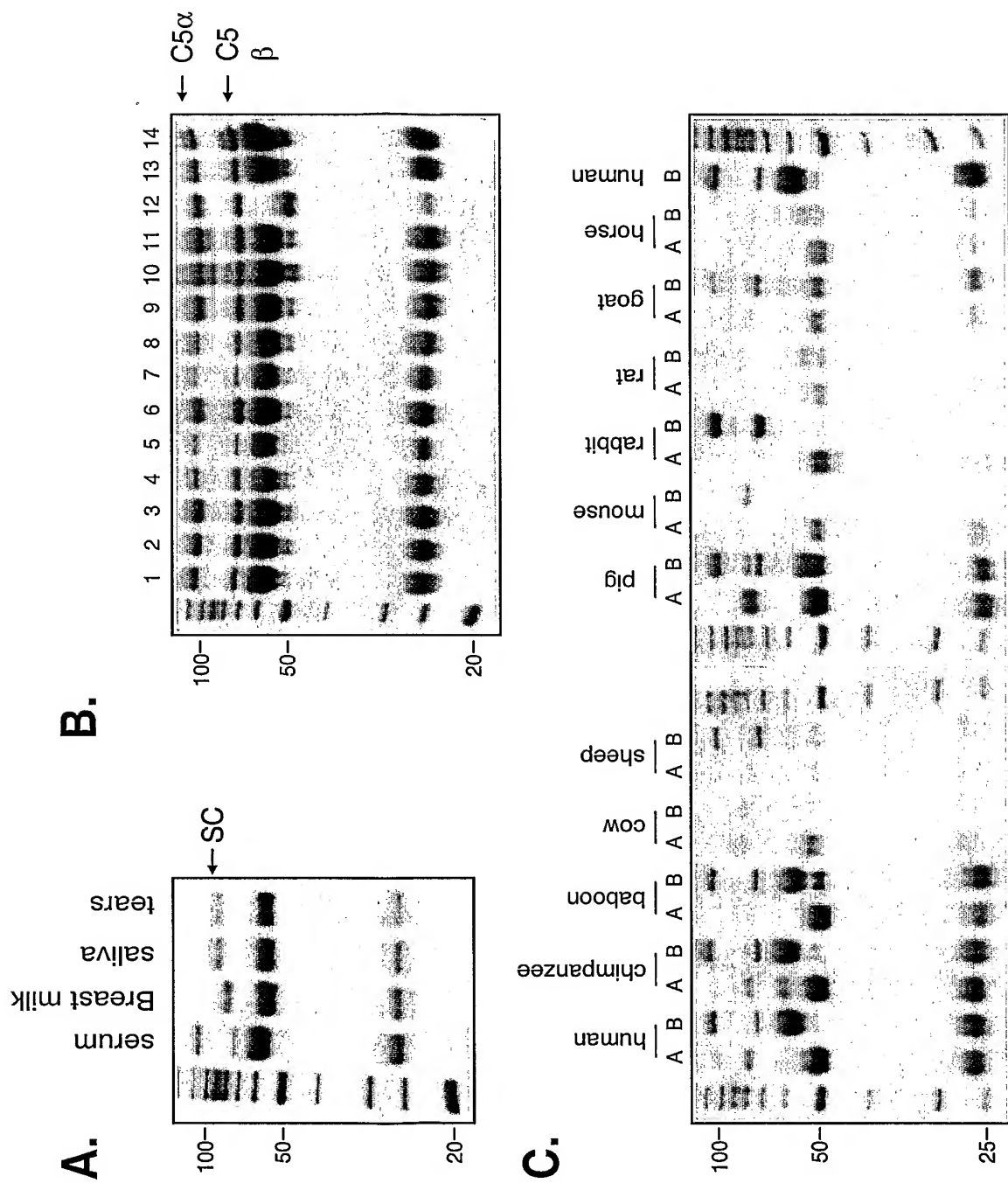


Figure 2



### Figure 3

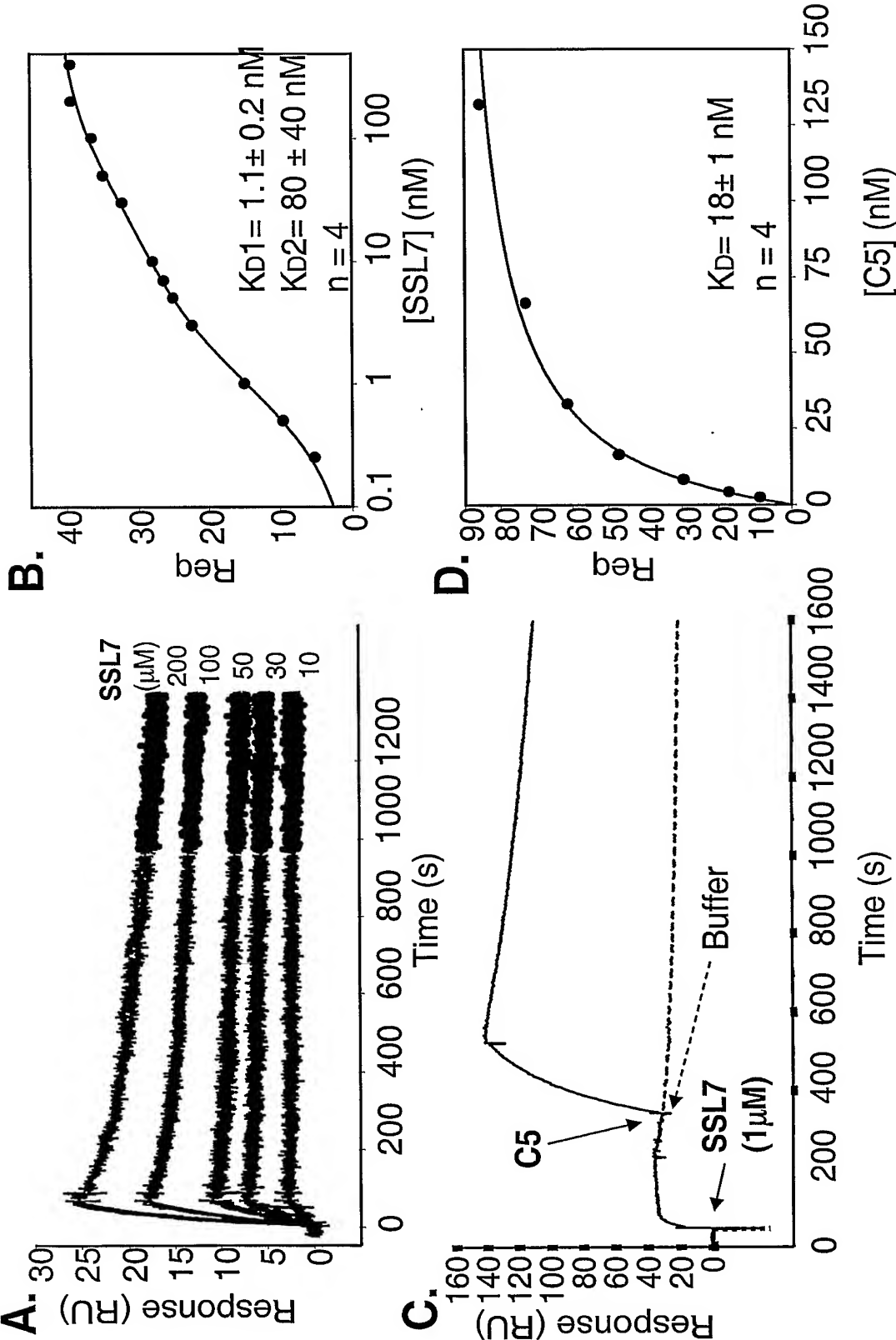


Figure 4

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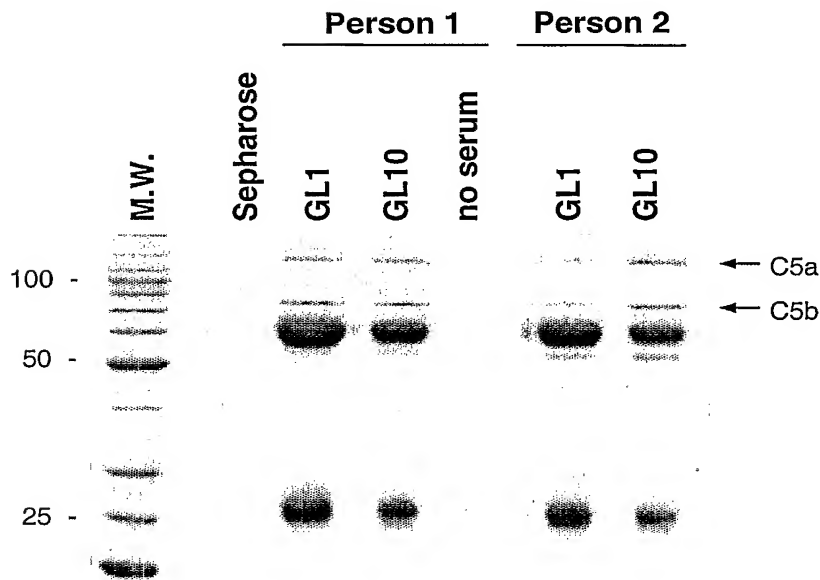
**A.**

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SSL7_GL10                KEKQERVQHLYDIKDLHRYYSSESSEFDFSNISGKVENYNGSNVVRFNQDQGNHQLFLLGKD
SSL7_GL1                 KEKQERVQHLYDIKDLHRYYSSESSEFDFSNISGKVENYNGSNVVRFNQEKQNHQLFLLGED
SSL7_MW2                 KEKQERVQHLYDIKDLHRYYSSESSEFDFSNISGKVENYNGSNVVRFNQENQNHQLFLLSGKD
SSL7_NCTC8325           KEKQERVQHLYDIKDLHRYYSSESSEFDFSNISGKVENYNGSNVVRFNQENQNHQLFLLGKD
SSL7_Mu50                KEKQERVQHLYDIKDLRYYSSESSEFDFSNISGKVENYNGSNVVRFNQEKQNHQLFLLGKD
SSL7_N315                KEKQERVQHLYDIKDLRYYSSESSEFDFSNISGKVENYNGSNVVRFNQEKQNHQLFLLGKD
SSL7_NCTC6571           AEKQERVQHLHDIRDLHRYYSSESSEFDFSNISGKVENYNGSNVVRFNPKDQNHQLFLLGKD
                        *****;*:*:*****;*:*****.******:
SSL7_GL10                KAKYKQGLEGGQNVFVVKELIDPNGRRLSTVGGVTCKNNQSSETNTHPLFVKKVYGGNLDASI
SSL7_GL1                 KAKYKQGLQGQDVFVVKELIDPNGRRLSTVGGVTCKNNQSSETNIHLNLVKLDDGGNLDATN
SSL7_MW2                 KDKYKEGLEGGQNVFVVKELIDPNGRRLSTVGGVTCKNNQSSETNTHPLFVKVYGGNLDASI
SSL7_NCTC8325           KEKYKEGLEGGQNVFVVKELIDPNGRRLSTVGGVTCKNNQSSETNTHPLFVKVYGGNLDASI
SSL7_Mu50                KDKYKKGLEGGQNVFVVKELIDPNGRRLSTVGGVTCKNNKSSETNTHLFFVKVYGGNLDASI
SSL7_N315                KDKYKKGLEGGQNVFVVKELIDPNGRRLSTVGGVTCKNNKSSETNTHLFFVKVYGGNLDASI
SSL7_NCTC6571           KEQYKEGLQGQNVFVQBELIDPNGRRLSTVGGVTCKNNKTSETNTHPLFVNKVNGBDLDASI
                        * :*:*:*:*:*****;***** :*::*: * :*:
SSL7_GL10                ESFSINKEEVSLKELDFKIRQHVLVKNYGLYKGTTKYKGKITFNLKDGEEKBEIDLGDKLQFE
SSL7_GL1                 DSFLINKEEVSLKELDFKIRKQLVEKYGLYQGTSKYKGKITIILNGGKKQBEIDLGDKLQFE
SSL7_MW2                 ESFLINKEEVSLKELDFKIRQHVLVKNYGLYKGTTKYKGKITFNLKDGEEKQBEIDLGDKLQFE
SSL7_NCTC8325           DSFSINKEEVSLKELDFKIRQHVLVKNYGLYKGTTKYKGKITINLKDGEKQBEIDLGDKLQFE
SSL7_Mu50                DSFLINKEEVSLKELDFKIRKQLVEKYGLYKGTTKYKGKITINLKDEKKEVIDLGDKLQFE
SSL7_N315                DSFLINKEEVSLKELDFKIRKQLVVEKYGLYKGTTKYKGKITINLKDEKKEVIDLGDKLQFE
SSL7_NCTC6571           DSPLIQKEEISLKELDFKIRQQLVKNYGLYKGTSKYKGKIIINLKDENKBEIDLGDKLQFE
                        *: * :*:*****;*:*:*****;*:***** :*::* *****
SSL7_GL10                HMGDVLNSKDIQNIAVTLKQI
SSL7_GL1                 RMGDVLNSKDIQNIEVTLKQI
SSL7_MW2                 HMGDVLNSKDIQNIAVTINQI
SSL7_NCTC8325           RMGDVLNSKDIQNIEVTLKQI
SSL7_Mu50                RMGDVLNSKDIQNIAVTINQI
SSL7_N315                RMGDVLNSKDIQNIAVTINQI
SSL7_NCTC6571           RMGDVLNSKDIRGISVTINQI
                        :*****. * *::**

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**B.**



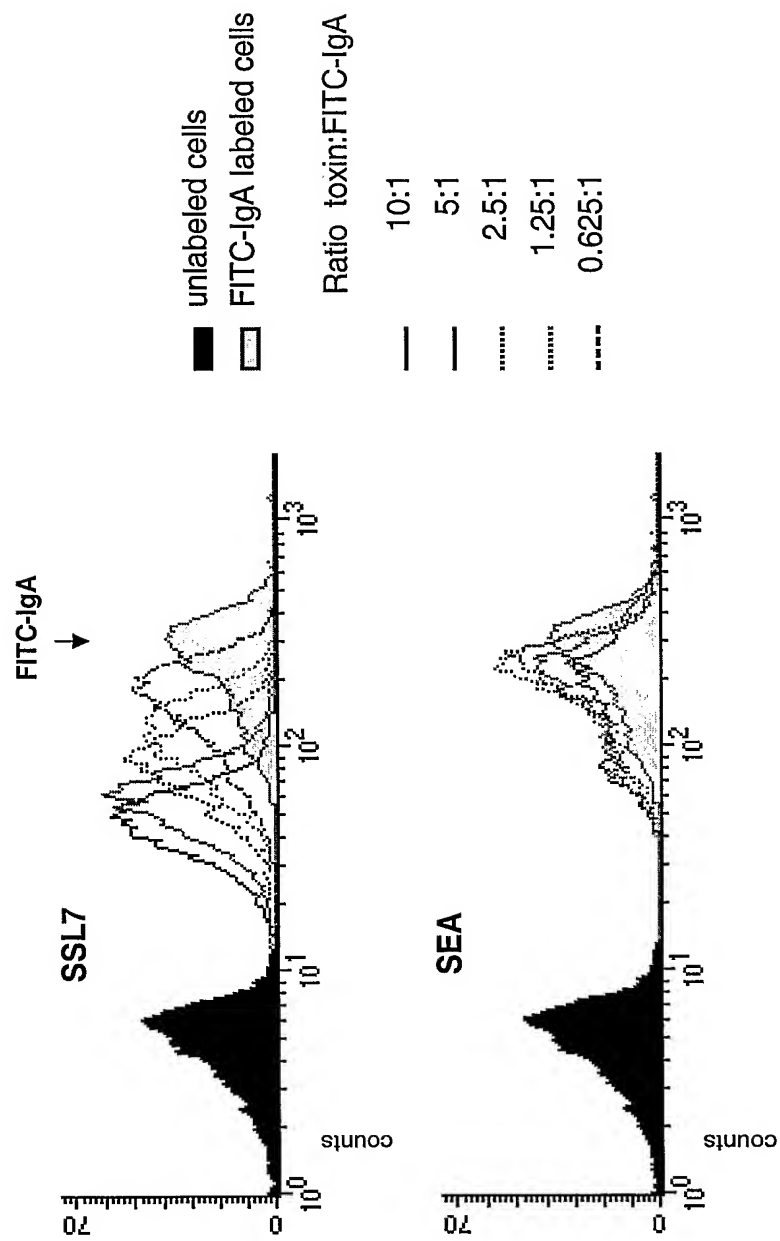


Figure 6

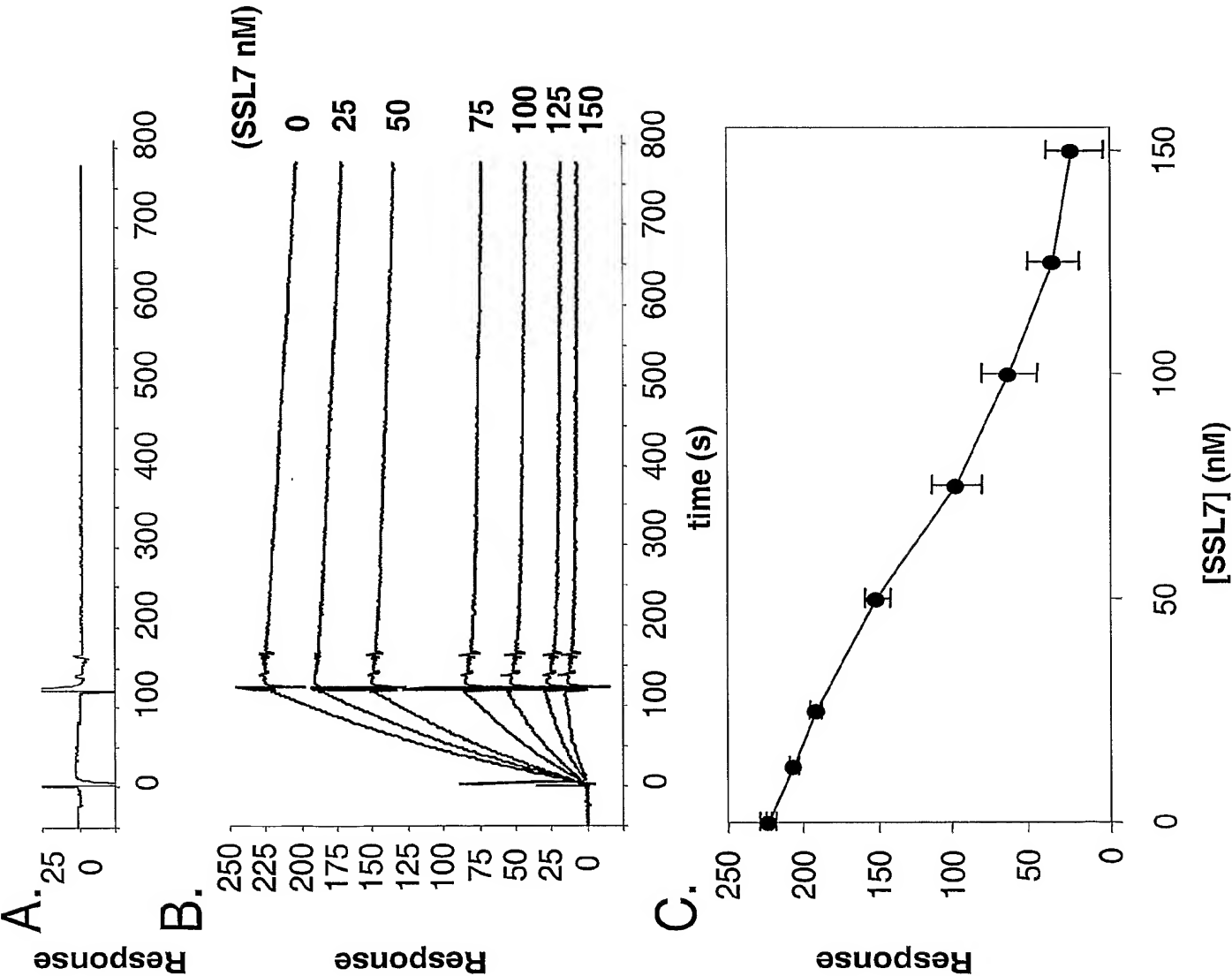


Figure 7

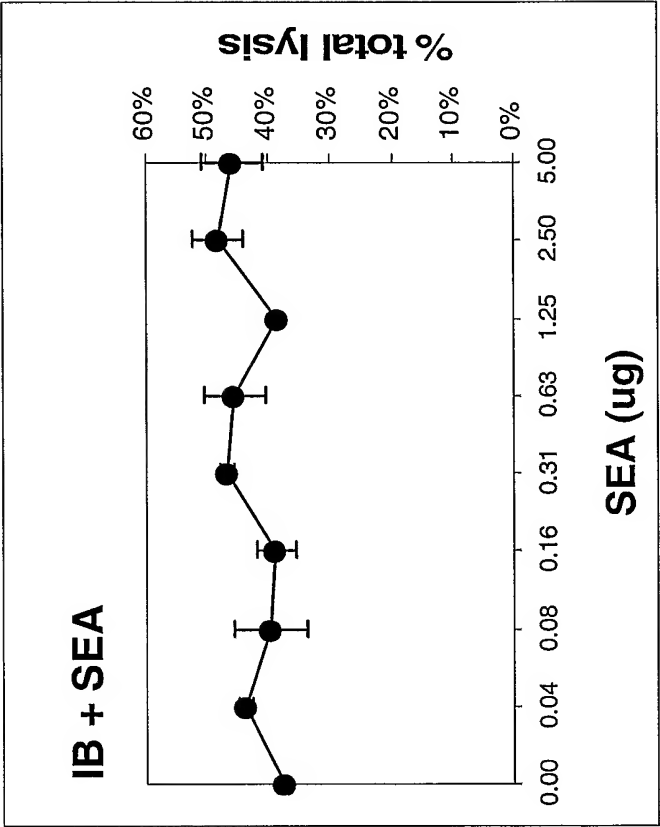
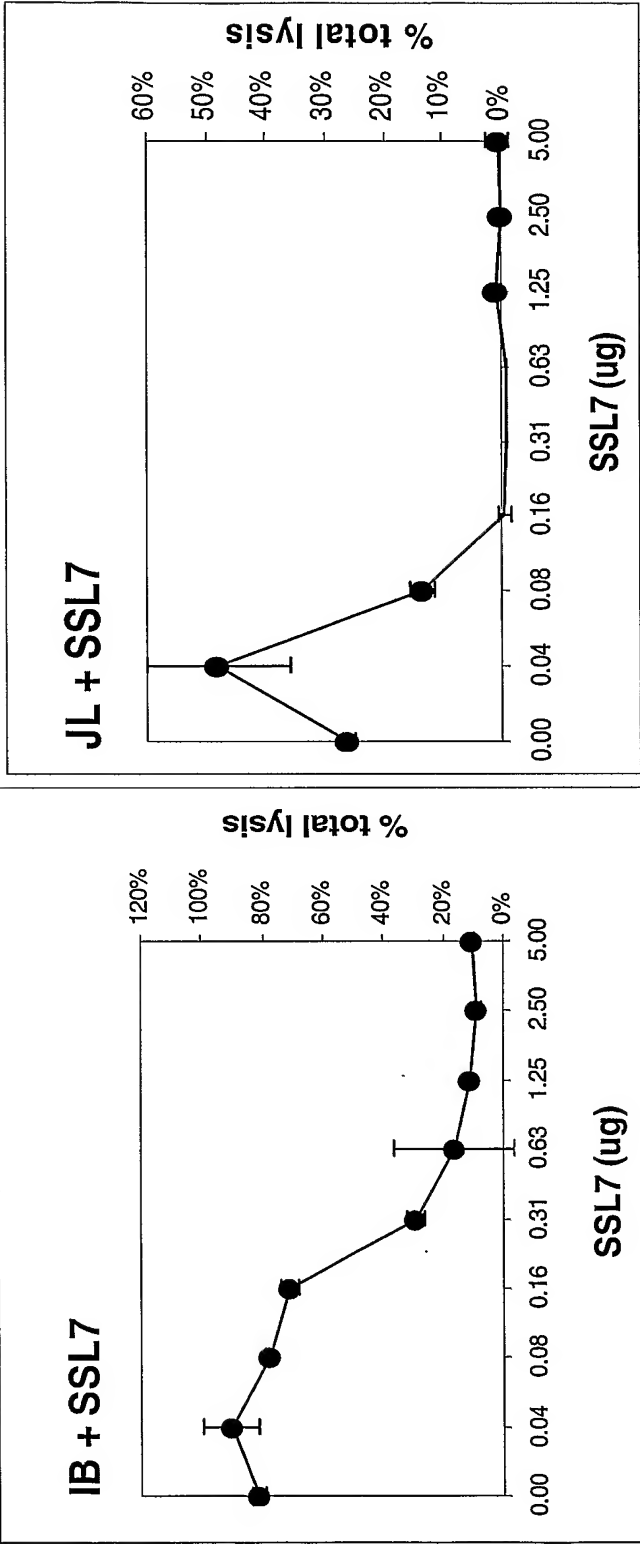
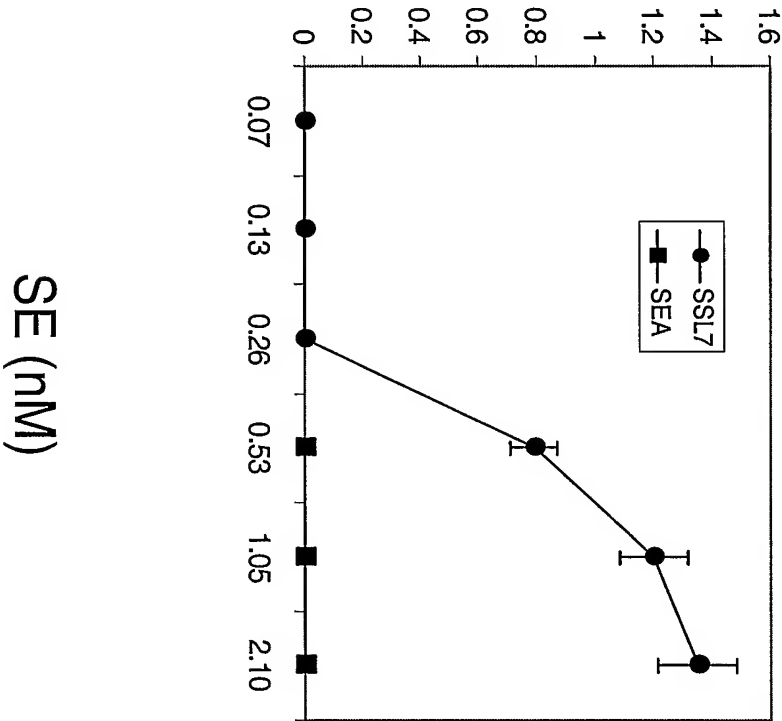


Figure 8



Bacterial Survival (cfu x 10<sup>-6</sup>)



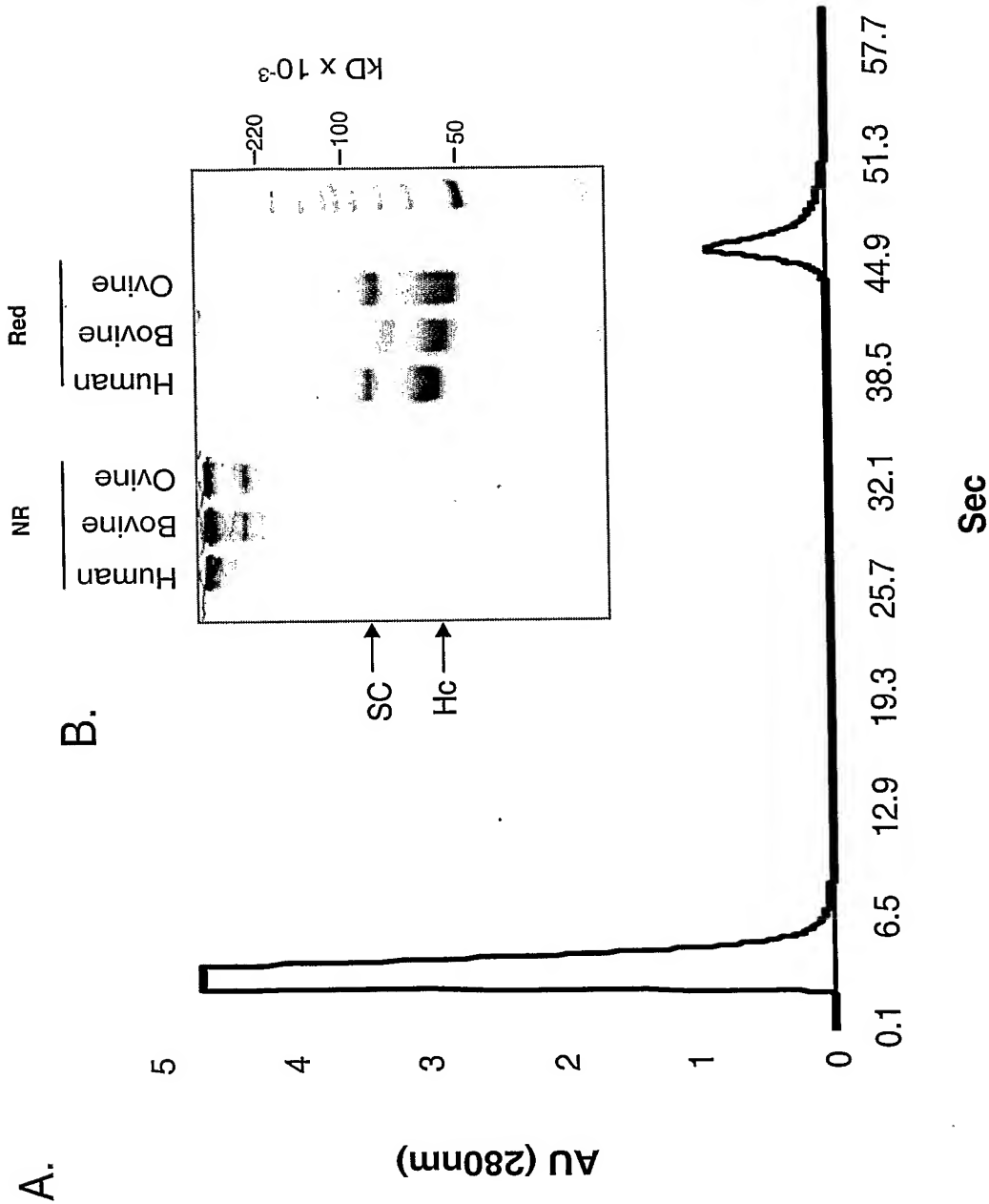


Figure 10